

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. canceled.
2. (previously presented) The method of claim 19, wherein the distribution of pre-defined important colors includes a distribution of skin-tone colors.
3. (previously presented) The method of claim 19, wherein the distribution of pre-defined important colors includes a distribution of neutral colors.
4. (previously presented) The method of claim 19, wherein the distribution of pre-defined important colors includes a distribution of sky colors.
5. (previously presented) The method of claim 19, wherein determining the supplemented distribution of colors is accomplished by appending additional pixels to the input digital color image to form an enlarged input digital color image, where the color of the additional pixels is distributed according to the distribution of pre-defined important colors, and then determining the distribution of colors in the enlarged input digital color image.
6. (previously presented) The method of claim 19, wherein the set of palette colors is determined using a sequential scalar quantization algorithm.
7. (previously presented) The method of claim 6, wherein the sequential scalar quantization algorithm includes:
 - i) sequentially partitioning the colors of the supplemented distribution of colors into a set of color space regions; and

ii) determining the set of palette colors by selecting an output color for each color space region in the set of color space regions.

8. (previously presented) The method of claim 7, further comprising:
determining the color value for each pixel of the output digital color image by identifying the palette color corresponding to the color space region containing the input color for the corresponding pixel of the input digital color image.

9. (previously presented) The method of claim 19, wherein the set of palette colors is determined using a vector quantization algorithm.

10. (previously presented) The method of claim 19, wherein the output digital color image is formed by assigning each color in the input digital color image to the color in the set of palette colors having the smallest color difference relative to the color of the input digital color image.

11. (currently amended) The method of claim 19, wherein ~~step f)~~ e) includes the use of a multi-level halftoning technique to assign each color in the input digital color image to one of the colors in the set of palette colors in such a way so as to approximately preserve the local mean color value.

12. (previously presented) The method of claim 11, wherein the multi-level halftoning technique is an error diffusion technique that distributes the quantization errors introduced when processing an input pixel to nearby input pixels that have not yet been processed.

13. (previously presented) The method of claim 19, wherein the distribution of pre-defined important colors is only used to supplement the distribution of colors in the input digital color image in color regions where the input digital color image contains a significant number of pixels.

14-18. canceled.

19. (currently amended) A method for converting an input digital color image having a set of possible input colors to an output digital color image having a set of palette colors, the number of palette colors being less than the number of possible input colors, wherein the set of palette colors is determined based on the distribution of colors in the input digital image supplemented by a distribution of pre-defined important colors, comprising:

- a) determining a distribution of input colors ~~using each pixel~~ from pixels in the input digital color image;
 - b) providing the distribution of pre-defined important colors;
 - c) combining the distribution of input colors with the distribution of pre-defined important colors to produce a supplemented distribution of colors that includes a greater emphasis on the important colors than does the distribution of input colors;
 - ~~b) providing a pre-determined target image of important colors;~~
 - ~~e) collecting additional pixels from the target image;~~
 - d) ~~adding the collected additional pixels to the distribution of input colors to determine a supplemented distribution of colors;~~
 - e) ~~determining a set of palette colors to be used in the formation of an output digital color image in response to~~ from the supplemented distribution of colors; and
- [[f)] e) forming the output digital color image by assigning each color in the input digital color image to one of the colors in the set of palette colors.

20. (currently amended) A computer storage medium having instructions stored therein for causing the computer to perform a method for converting an input digital color image having a set of possible input colors to an output digital color image having a set of palette colors, the number of palette colors being less than the number of possible input colors, wherein the set of palette colors is determined based on the distribution of colors in the input digital image supplemented by a distribution of pre-defined important colors including:

a) determining a distribution of input colors ~~using each pixel~~ from pixels in the input digital color image;

b) providing the distribution of pre-defined important colors;

c) combining the distribution of input colors with the distribution of pre-defined important colors to produce a supplemented distribution of colors that includes a greater emphasis on the important colors than does the distribution of input colors;

~~b) providing a pre-determined target image of important colors;~~

~~c) collecting additional pixels from the target image;~~

~~d) adding the collected additional pixels to the distribution of input colors to determine a supplemented distribution of colors;~~

~~e) determining a set of palette colors to be used in the formation of an output digital color image in response to~~ from the supplemented distribution of colors; and

[[f)] e) forming the output digital color image by assigning each color in the input digital color image to one of the colors in the set of palette colors.

21. (new) The method of claim 19, wherein the distribution of pre-defined important colors comprises a target image of the important colors, the method further comprising:

collecting additional pixels from the target image; and

adding the collected additional pixels to the distribution of input colors to produce the supplemented distribution of colors.

22. (new) The method of claim 19, wherein the important colors are colors that are likely to appear in smoothly varying image regions within a digital color image.

23. (new) The computer storage medium of claim 19, wherein the distribution of colors in the input digital color image, the distribution of pre-defined important colors, and the supplemented distribution of colors are histograms.

24. (new) The method of claim 20, wherein the distribution of pre-defined important colors comprises a target image of the important colors, the method further comprising:

collecting additional pixels from the target image; and
adding the collected additional pixels to the distribution of input colors to produce the supplemented distribution of colors.

25. (new) The computer storage medium of claim 20, wherein the distribution of colors in the input digital color image, the distribution of pre-defined important colors, and the supplemented distribution of colors are histograms.